TABLE 1
DIFFERENCES BETWEEN Liparis lydiaii SP. NOV. AND L. platyrachis

	L. platyrachis Hook. f.	L. lydiaii
Pseudo-bulb	Oblong, compressed, 1.25 cm long.	Ovoid-cylindric, 1-2 cm long, 3.5-6 mm diam.
Leaf	3-5, linear-lanceolate, thickly membranous, 1.5-3 cm long and 0.3-0.5 cm broad.	4, ovato-oblong, thinly membranous with undulating surface, 1-2.7 cm long and 0.4-0.9 cm broad.
Inflorescence	Pendulous, interruptedly winged and with short linear bracteoles.	Sub-pendulous, terete, with 2-3 cordate amplexicaul bracteoles.
Flowers	0.63 cm long and 0.25 cm broad, pale ochraceous yellow.	0.7-0.8 cm long, greenish pink.
Sepals	Dorsal sepal narrower than the lateral sepals, with margin recurved.	Dorsal sepal, cordate, much broader than lateral sepals, margin slightly recurved.
Lip	Quadrate.	Cordate.

platyrachis Hook.f. of the above mentioned section but differs as shown in Table 1.

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# COPIDOGNATHUS KRANTZI, A NEW SPECIES OF HALACARIDAE (ACARI) FROM NICOBAR ISLANDS (INDIAN OCEAN)<sup>1</sup>

TAPAS CHATTERJEE<sup>2</sup> (With ten text-figures)

Copidognathus krantzi, a new species of Halacaridae, is described here, collected among the phytal sediments of Mus Island (Nicobar islands). Similarity and dissimilarity with related species are discussed.

## INTRODUCTION

Halacarids are the least known meiofaunal taxa of marine biota in general and particularly so of Indian seas. Halacarids form about 90% of the phytal faunal communities in the upper shore (Bartsch 1988). No meaningful ecological researches can be contemplated without information on taxonomy, zoogeography and biodiversity. Therefore survey of the fauna of

halacarids inhabiting the phytal realm was undertaken by the author, resulting in a rich and diverse halacarid collection along the Indian coast. Of these, many turned out to be new species and new records. The present paper describes *Copidognathus krantzi*.

## Copidognathus krantzi sp. nov.<sup>3</sup>

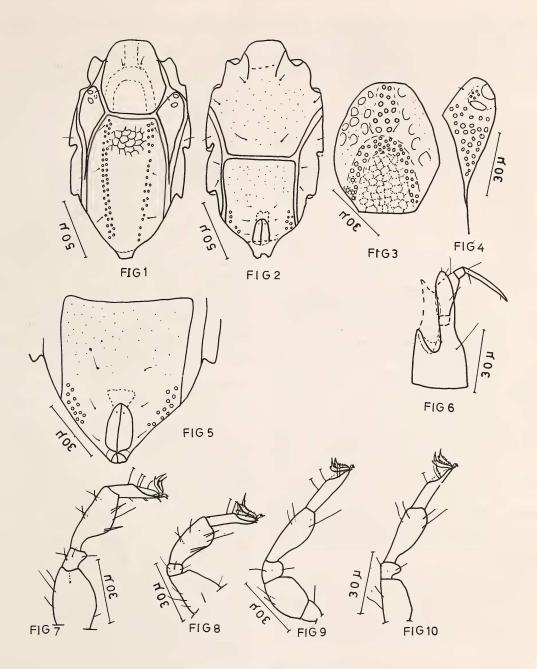
Diagnosis: Posterior areolae of anterodorsal plate inverted-U shaped, ocular plate caudiform posteriorly, postero-dorsal plate with two costae, all ventral plates separate, epimeral process I well developed and coxal in origin, tibiae I and II with 3 ventral setae.

Locality: Three females were collected

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<sup>&</sup>lt;sup>3</sup>Named after Prof. G.W. Krantz, a world famous acarologist.



Figs. 1-10. Copidognathus krantzii sp. nov.

- 1. Idiosoma dorsal, female, 2. Idiosoma ventral, female, 3. Magnified view of AD showing areolae, 4. Magnified view of OC showing corneae, areolae and other details, 5. GA of female, 6. Gnathosoma, 7. Telofemur to tarsus of leg I,
- 8. Telofemur to tarsus of leg II, 9. Telofemur to tarsus of leg III, 10. Telofemur to tarsus of leg IV.

among Halimeda opuntia from Mus Island (Nicobar islands).

Type: Holotype in the author's collection in the Department of Life Science, Regional College of Education, Bhubaneswar.

### DESCRIPTION

Female: The idiosomal length of females range between 175  $\mu$  to 185  $\mu$  The various measurements of one of the females are as under:

	Length (µ)	Width (µ)
Idiosoma	183	100
AD	62	51
OC	77	25
PD	104	64
AE	41	55
GA	75	62
GO	24	13
Gnathosoma	56	26

Dorsal plates separate (Fig. 1). Anterodorsal plate (AD) with two areolae, one anterior and one posterior. The anterior areola consists of dark fovea. Posterior areola inverted-U shaped and made up of rosette pores (Fig. 3). Dorsal seta 1 (ds1) located anterior to the posterior areolae and dorsal seta 2 (ds2) on the anteromedian margin of ocular plate (OC). Two corneae present on OC. The OC caudiform posteriorly (Fig. 4). Postero-dorsal plate (PD) with two costae 2 pores wide. The dorsal setae 3, 4 and 5 (ds3, ds4, ds5) are on the anterior, middle and posterior reaches of PD respectively.

Ventral plates separate (Fig. 2). Anterior epimeral plate (AE) bears 3 pairs of setae and is without any areolae. AE sculptured with fine pores (pycnotic). EpI well developed and coxal in origin.

PE with three ventral and one dorsal seta and a few rosette pores. Three perigenital setae (PGS) present on either side of the GO. The GO with a pair of sclerites and a pair of subgenital setae (SGS) located anteriorly, ovipositor small (Fig. 5).

Rostrum extends upto the base of palpal patella. Palp 4-segmented. Palpal trochanter (P<sub>1</sub>) and patella (P<sub>3</sub>) without any seta. Palpal femur (P<sub>2</sub>) with one dorsal seta. Palpal tibiotarsus (P<sub>4</sub>)

with three basal setae and one distal eupathidia. A pair of proto-, deuto-, trito-, and basirostral setae are present on Gnathosoma (Fig. 6). Tectum short and dorsally sculptured with fovea.

Chaetotaxy of legs I-IV is as follows:

Trochanter	1-1-1-0
Basifemur	2-2-2-2
Telofemur	5-5-2-2
Patella	4-4-3-3
Tibia	7-7-5-5

Chaetotaxy of tarsi is discussed in the text.

Telofemorae III and IV devoid of ventral setae.

Tibiae I and II with 3 ventral setae and 4 dorsal setae (Figs. 7, 8). Tarsus I with 3 ventral setae (one basal and two distal filiform setae), 3 dorsal long setae, one solinidion, one profamulus and four PGS (two doublets eupathidia) (Fig. 7). Tarsus II bears 3 dorsal long setae, one solinidion, and two PAS (two singlet eupathidia) (Fig. 8). Tarsi III and IV with 4:3 dorsal setae (Figs. 9, 10). PAS of tarsi III and IV are not discernible.

Male, larva and nymph: Not found in the samples collected.

Distribution: Bay of Bengal (eastern Indian Ocean).

The species can be assigned to the key group 5200 of Newell (1984) as it possesses EpI coxal in origin, ds<sub>2</sub> on OC, ds<sub>3</sub> on PD, single pair of basirostral seta, telofemorae III and IV devoid of ventral setae, parallel striae on the cuticular membrane between AD and PD. Further, certain characters like the body size, long and posteriorly caudiform OC, well developed EpI coxal in origin and telofemora III and IV lacking ventral seta relate the species also with Copidognathus oculatus group (Bartsch 1977). The present species is demarcated from the members of the key group 5200 and C. oculatus group in having an inverted-U shaped posterior areola and a foveatus anteriar areola.

C. ypsilophorus Newell, 1984 belonging to 5200 possessing an inverted Y shaped areola, resembles the present species but differs in having the areola commencing away from the

posterior margin of AD, costae 5-7 rosette pores wide in the middle, and 2-3 pore wide paracostae. *C. propinqus* Newell, 1951 and *C. orientalis* Newell, 1951 resemble the present species in the shape of the posterior areolae. However, the caudiform nature of OC, ds<sub>2</sub> on OC, and small size of the present species separate it from the two species.

C. krantzi sp. nov. resembles Arhodeoporus thyreoporus Andre, 1959 also in the shape of areolae of AD, presence of two costae on PD, and caudiform OC. But in C. krantzi, the ventral

plates are separate and tibiae I and II bear three ventral setae while in A. thyreoporus the ventral plates are fused and tibiae I and II have four ventral setae.

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